

assumptions. Thus the design criteria that permits the allocation of materials against the original requirement with the possible reallocation to more likely requirements is necessary. Therefore, the present invention provides an inter-forecast allocate/unallocate mechanism. Additionally, both the drilling plans and oil field country tubular goods materials production plans are necessarily long term. It is therefore necessary to allocate materials in such a manner as to insure that actualized drilling plans are satisfied while assuring that terminated drilling plans do not adversely impact materials stocking level as this would necessarily increase costs and would lead to long holding periods with the resultant materials deterioration. Thus, the requirement that allocations be associated with both on-hand and on-order materials is needed. TIMS tracks materials on-order and on-hand status and permits forecast allocations.

[0007] The invention TIMS also maintains dual units of measure, since OCTG materials are traditionally quantified by two different measures. Initial requirements typically are specified using units of length, while at the time of consumption these requirements are specified in terms of units of standard length (joints).

[0008] Also, since drilling activities span the globe, drilling operations are typically documented using measurement units used by the countries in which these operations take place. Thus, TIMS supports both English and Metric units of measure.

[0009] Another obstacle in the management of materials is that the initial purchase state of OCTG materials is not commonly the same as that required in the final delivery phase. Furthermore, there are a wide variety of materials necessary for finishing requirements that are

specific to a given well drilling plan. Therefore, TIMS supports both the inspection and post-production fabrication activities.

[0010] Effective deployment of material to meet delivery needs requires that the state of the delivery be tracked accurately. Some activities are single stated, while others are dual stated. TIMS supports the tracking of materials in "in-process" states of "IN" and "OUT."

[0011] In order that cost effective delivery be assured with information available to justify optimal pricing to the customer, it is necessary to monitor the major cost categories and communicate these cost values to the customer as support for cost plus pricing. TIMS maintains several cost categories, including raw materials, fabrication, shipping, and inspection.

[0012] The tracking of a wide variety of materials procurement, management, and delivery activities is a cumbersome activity. To minimize the labor required to maintain such a system, a tightly linked system is required. Therefore, TIMS supports extensive forward and reverse information flows.

[0013] The extensive process and sub-process activities spawn the need for the process managers to be alerted to changing states. TIMS modules contain an action, action date, user assignment, and field set that is automatically displayed to the originator (and assignee) when the defined action falls into a date window-reminder.

[0014] OCTG management involves a variety of activities, each involving measures of the material. The multiple measurement activities lead to variances that must be compensated

within and across activities. TIMS supports both in-process adjustments (close adjustments) and cross-process adjustments (zero adjustment).

[0015] Supply Chain Management (SCM) activities can involve materials of multiple ownership's. The TIMS system supports the partitioning of inventory in association with one or more business interests. TIMS supports inventory group associations with specific owners.

[0016] OCTG delivery pricing may use various and different pricing models. TIMS system supports both distributor and custodial pricing upon delivery.

[0017] Conventional procurement, materials management, and delivery systems involve a variety of tracking forms and reports. These may involve one or more internal elements of an organization. The data input required to track these activities could become burdensome. TIMS supports user defined default data template values to pre-fill standard forms.

[0018] The maintenance and support of a global centric materials management system requires that modules present a flexible set of functions. Different operating entities may require functions not appropriate to another or the function may contain algorithmic differences. Upon being called by the user, each TIMS system module queries a site configuration lookup table to determine specific functions and function implementations. This permits one code implementation to serve multiple (global) operating entities. TIMS supports a site based function implementation.

[0019] An extensive set of reference (lookup) tables insures that minimal data entry is required and that standard values are validated to appropriate values only. TIMS performs extensive data validations.